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54 Acoustic signal reproducing apparatus.

57 An acoustic signal reproducing apparatus for reproducing acoustic signals by headphone devices (2) is disclosed. The left channel and right channel acoustic signals are provided by a device (23) for processing the acoustic signals with constant transmission characteristics from an imaginary sound source to both of the listener's ears. The left channel and right channel acoustic signals, processed in this manner by the device (23), are provided by an acoustic signal processing device (21) with a level difference and time difference consistent with changes in orientation of the listener's head (M).

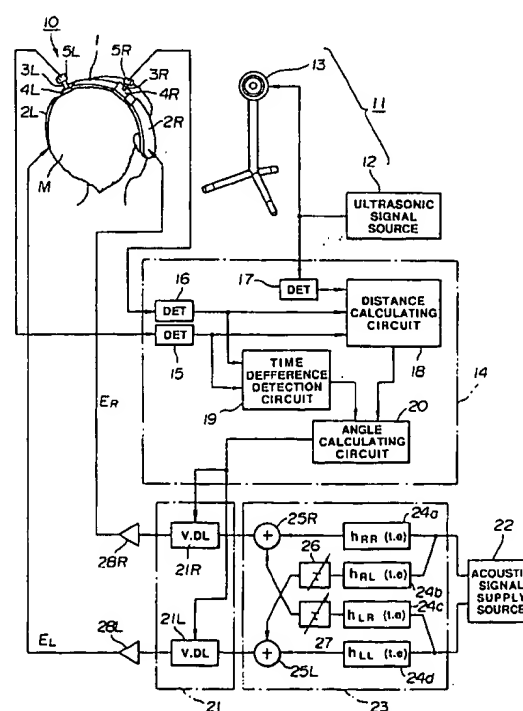


FIG.1



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number

EP 91 30 0306

| DOCUMENTS CONSIDERED TO BE RELEVANT   |  |   |   |
|---|--|---|---|
| Category  | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim                                 | CLASSIFICATION OF THE APPLICATION (Int. Cl.5) |
| Y   | PATENT ABSTRACTS OF JAPAN<br>vol. 13, no. 364 (E-805) 14 August 1989<br>& JP-A-1 121 000 ( SONY ) 12 May 1989<br>* abstract *  | 1   | H04S1/00<br>H04R5/04                          |
| Y   | PATENT ABSTRACTS OF JAPAN<br>vol. 7, no. 226 (E-202) 7 October 1983<br>& JP-A-58 116 900 ( SONY ) 12 July 1983<br>* abstract * | 1   |   |
| A   | WD-A-8 903 632 (COOPER ET AL.)<br>* page 9, line 28 - page 11, line 32; figures 1A, 1B *                                       | 4   |   |
| A   | DE-A-2 918 831 (INSTITUT FÜR RUNDfunkTECHNIK)<br>* claim 1; figure 1 *   | 5   |   |
| A   | US-A-3 962 543 (BLAUERT ET AL.)  |   |   |
|   |  |   | TECHNICAL FIELDS SEARCHED (Int. Cl.5)         |
|   |  |   | H04S<br>H04R                                  |
| The present search report has been drawn up for all claims  |  |   |   |
| Place of search<br>THE HAGUE  |  | Date of completion of the search<br>07 APRIL 1992 | Examiner<br>LAMBLEY                           |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>F : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p> |  |   |   |

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